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ABSTRACT

Social studies educators have promoted inquiry learning as a valuable method of instruction. Research into the use of inquiry methods in the teaching and learning of history has demonstrated that this method has much to offer. Recently, the use of technological tools, including the Internet, has received attention as a means of transforming social studies instruction. This case study of sixth-grade students (n=23) investigated the integration of the inquiry learning method and the Internet medium through the WebQuest approach. A WebQuest may be defined as an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Internet. Data consisted of field observations, interviews with students, student work, and a teacher's journal. Findings are presented as three hypotheses for future study of the WebQuest approach to inquiry learning: (1) students have differing perceptions of the value of Internet sources and print sources, but many find print sources preferable to Internet sources; (2) students' strategies for gathering and organizing information are initially characterized by a quest for the "Path-of-Least-Resistance," but the teacher can successfully guide students to more productive approaches; and (3) students of varying academic ability levels can conduct inquiry-oriented investigations, but they approach and perceive the value of such investigations differently. The interview protocol is appended. (Contains 49 references.) (Author/BT)

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Engaging Students in Historical Inquiry using Internet Resources

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Abstract

Social studies educators have long promoted inquiry learning as a valuable method of instruction. Specifically, research into the use of inquiry methods in the teaching and learning of history has demonstrated that this method has much to offer. Recently, the use of technological tools, including the Internet, has received attention as a means of transforming social studies instruction. This case study of a sixth grade classroom investigates the integration of the inquiry learning method and the Internet medium through the WebQuest approach. The findings are presented as three hypotheses for future study of the WebQuest approach to inquiry learning: 1) students have differing perceptions of the value of Internet sources and print sources, but many find print sources preferable to Internet sources; 2) students' strategies for gathering and organizing information are initially characterized by a quest for the 'Path-of-Least-Resistance,' but the teacher can successfully guide students to more productive approaches; and 3) students of varying academic ability levels can conduct inquiry-oriented investigations, but they approach and perceive the value of such investigations differently.

Engaging Students in Historical Inquiry using Internet Resources

Computer-assisted instruction (CAI) is frequently described as a powerful medium and method for realizing the goals of social studies education (Braun, et. al 1998; Braun & Risinger, 1999; Rose and Ferlund, 1997). Within the CAI domain, hypermedia environments, such as the Internet, are a rapidly expanding force in education. The increasing popularity, reliability, and availability of the Internet in schools have received attention as a potential means of transforming social studies education (Braun & Risinger, 1999). As a repository of resources, the Internet offers significant opportunities for social studies learning in the form of data collection and analysis. The Internet provides teachers with access to materials that may be used for activities such as critical thinking, problem-solving, civic participation, and service learning with the goal of building the knowledge, skills, and values necessary for civic competence.

Although researchers have begun to turn their attention to the effects of CAI and the use of the Internet in K-12 classrooms, there is a lack of classroom-based research in this field. In an analysis of the literature on telecommunications in the classroom, Fabos and Young (1999) found that, "much of the current research is contradictory, inconclusive, and possibly misleading" (p. 218). They noted that the research in the field is often overwhelmed by non-research-based discourse in technology-friendly journals that offer optimistic views based on

cursory and anecdotal evidence. A similar deficit exists in the field of social studies education (Berson, 1996; Diem, 2000).

In a discussion of the status of social studies research in general, Leming (1997) observed that researchers have become detached from school settings and the task of identifying best practices in social studies teaching. He argued that, "In the field of medicine the equivalent would be to bring new medicines to the marketplace in the absence of clinical trial research" (p. 503). It is important that social studies educators base their arguments regarding the use of technology for social studies teaching and learning on K-12 classroom-based research. In an effort to contribute to the research base regarding technology in social studies education, the present study is an investigation of the WebQuest technique as an approach to Internet-based inquiry learning in a sixth grade social studies classroom.

WebQuest as an Integration of Medium and Method

Social studies educators have long promoted inquiry learning as a desirable method of instruction (e.g., Bank & McGee-Banks, 1999; Beyer, 1971; Hunt & Metcalf, 1955; Massialas & Cox, 1966; Nelson, 1970; Parker, 2001). Levstik and Barton (1997) explained, "People learn when they seek answers to the questions that matter to them; their understanding changes only when they become dissatisfied with what they know. The process of asking meaningful

questions, finding information, drawing conclusions, and reflecting on possible solutions is known as inquiry" (p. 13). More specifically, researchers have noted many advantages to studying history by engaging in historical inquiry (e.g., Barton, 1997; Brophy et al., 1992; Downey & Levstik, 1991; Foster, et al., 1999; Gabella, 1994; Seixas, 1993; VanSledright & Brophy, 1992). This research base has indicated that students learn history most effectively when they are engaged in asking historical questions, collecting and analyzing historical sources, and determining historical significance.

Critics of traditional history instruction (e.g., Loewen, 1995; Zinn, 1995) suggest that the transmission model of instruction results in students who are misinformed and bored. Although research offers much to support an inquiry model of instruction and to discount a transmission model of instruction, it appears that few classroom teachers have adopted historical inquiry as a primary method of instruction. Loewen (1995) speculated that this occurs because of the system of schooling and the nature of the relationship between teachers and students:

> Some social studies and history teachers try to win student cooperation by telling them, when introducing a topic, not to worry, they won't have to learn much about it. Students happily acquiesce. Students also invest a great deal of creative energy in getting teachers to waste time and relax

> requirements. Teachers acquiesce partly because, as with much day-to-day resistance during slavery, yielding does not really threaten the system. Day-to-day school resistance also provides students a form of psychic distance, a sense that although the system may have commanded their pens, it has not won real cooperation from their minds.

Although this explanation of structural barriers may have some merit, practical considerations such as access to quality resources for historical inquiry and the classroom management issues that arise during inquiry investigations may have typically lead teachers to avoid the method. Both of these practical concerns may be addressed through the use of the WebQuest approach. This approach provides teachers and students with easy access to historical documents, as well as a structure for analyzing those documents.

A WebQuest may be defined as an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Internet (Dodge, 1995). Students access a WebQuest online and are guided through the basic stages of the inquiry process. The critical attributes of a WebQuest consist of the following sections: introduction, task, process, evaluation, and conclusion. A teacher constructs a web page that includes these components and posts the page to an Internet server for students to access. Each of the components of a WebQuest parallels a phase of the inquiry process. The introduction section

provides a compelling context for inquiry. It is typically a brief statement to the students that serves as the anticipatory set for the lesson by establishing the context, accessing prior knowledge, posing key questions, and motivating the student to proceed. The task section provides the students with information regarding the final product of their inquiry. Here a teacher may explain what the student or group of students is supposed to accomplish. For example, the teacher may ask students to solve a problem, come to a decision, or create a product that demonstrates their knowledge of the topic or issue. The process section outlines the steps that students will take, as well as the resources needed to complete the task. Students are provided with guidance as to how they should proceed through data collection and analysis. Most importantly, this section contains links to web sites that provide students with access to sources relevant to their investigation. Since the teacher screens the sites in advance, students are linked directly to accurate and appropriate resources. In addition to documents, photographs, and other common historical sources, students may have access to experts in the field, students elsewhere who are researching the same topic, audio archives, and video footage. The evaluation section describes how students will be assessed on the product of their task, and the conclusion offers a context for debriefing the lesson and suggestions for further inquiry.

The WebQuest approach is intended to capitalize on the advantages of the Internet for guided inquiry learning while mitigating some of the disadvantages. The advantages of student access to online primary sources, a structure for evaluating those resources, and teacher supervision in identifying appropriate and relevant content suggest that the WebQuest approach could be a powerful technique for instruction (Milson & Downey, 2001). The technique has become very popular among teachers, curriculum coordinators, and teacher educators since it's initial development in 1995 by Bernie Dodge of San Diego State University. Dodge's WebQuest Page on the Internet boasts over one and a half million visitors as of this writing. The WebQuest Page offers approximately 300 sample WebQuests for social studies, templates for WebQuest creation, and an e-mail discussion group. It is also becoming common to see WebQuest workshops and sessions at professional conferences.

The literature on WebQuests contains many positive statements regarding the value of the approach (e.g., Brucklacher & Gimbert, 1999; Yoder, 1999; Watson, 1999; Donlan, 1999; McNally & Etchison, 2000; March, 2000). There also exist several positive reports on the use of this approach for social studies education (e.g., Pohan & Mathison, 1998; Braun, 1999; Mathison & Pohan, 1999; Zukas, 2000; Dutt-Doner, et al., 2000; Milson & Downey, 2001), and in special education settings (Kelly, 2000). The WebQuest approach appears to be in

widespread use, yet the literature largely reports anecdotal accounts of success rather independent research on this instructional technique. There is a need for classroom-based research to investigate the effectiveness of this technique. The purpose of this study was to explore the use of the WebQuest technique as an integration of the Internet medium and the inquiry learning method in a sixth grade social studies classroom.

Method

Design and Participants

Given that the use of the Internet for inquiry learning is a relatively new phenomenon that is proposed as an instructional innovation, the heuristic qualities of the case study design seemed appropriate for this study (Stake, 1995; Merriam, 1998). The study took place in a single sixth grade classroom in a school located within a working class neighborhood in a medium-sized, Midwestern city. Of the 23 students, 12 were boys and 11 were girls. The students were predominately Caucasian, but included two African-American students and one Hispanic student. The students' teacher, Pam, has fifteen years of experience teaching elementary school (1). She is nearing completion of a Master's degree in educational administration and is actively involved in professional development such as attending conferences, conducting district workshops, and coordinating a partnership with a local university.

Case Selection

Pam and her students were selected for this study as a purposeful sample because this classroom was believed to be an information-rich setting (Patton, 1990). A list of criteria was established prior to selecting a site (LeCompte & Preissle, 1993). These criteria included:

1. The teacher must be interested in infusing technology into instruction, but not particularly fluent in how to do this.
2. The students should have some experience with using the Internet in school, but not with the WebQuest technique.
3. The students should have varying ability levels.
4. The school and the classroom should contain reasonably up-to-date computers, but it should not be a highly technologically equipped setting.

The first criterion was selected in order to gain access to the decision-making and responses of a typical teacher. Given the important role of the teacher in selecting curricular content and instructional methods (Thornton, 1991), a teacher was selected who may be on the threshold of infusing technology, but who has not quite decided how to accomplish this. It is likely that an interest in technology with a concomitant trepidation about using it for instruction is common among social studies teachers. Pam fit this description as she was excited the first time

she was exposed to the WebQuest approach, but indicated some uncertainty as to how this might be applied in her classroom.

Criterion two was chosen in an effort to reduce the novelty factor that may complicate classroom research in which technology use is a key variable (e.g., Saye & Brush, 1999). As the integration of Internet resources becomes more commonplace in classrooms, this effect is diminishing. However, for the purpose of this study, it was desirable to select a group of students who were somewhat familiar with the Internet and with computer use in school so that the use of the Internet did not unnecessarily impede instruction. The students in Pam's classroom had engaged in Internet searching in her class and many reported using the Internet regularly at home.

The third criterion was selected in order to investigate the effectiveness of the WebQuest approach for students with varying learning ability levels. Given that the Inclusion model is common in many schools today (Friend & Bursuck, 1998) and thus most classrooms will contain students of varying ability levels, a case was sought that would mirror this typical case. Pam's class was designated as an Inclusion class and thus contained six students with learning disabilities such as Attention-Deficit/Hyperactivity Disorder and difficulties with written language, reading, math, and work completion. The class also contained a student with the

physical impairment, spinabifida. A resource teacher with training in special education assisted these students in the regular classroom a few hours each day.

Finally, an effort was made to select a classroom that was neither technologically-rich nor technologically-poor. Although technology is a high priority among school districts, few schools have the latest, fastest computers in every classroom. The district in which Pam teaches has made a commitment to include six computers in each classroom. According to the district technology coordinator though, many of these computers are somewhat outdated. Pam's classroom contains four IBM compatible 100 megahertz, 486 DX4 computers with 32 megabytes of RAM and two IBM compatible 200 megahertz, Pentium II computers with 32 megabytes of RAM. The two Pentium II computers are relatively fast and fairly reliable, however the other four computers are at least five years old and thus are fairly slow and unreliable. The technology coordinator for Pam's district reported that the mixture of computers in Pam's classroom is common across the district and that they are trying to replace the older computers. Since technological advances occur much faster than school budgets grow, it is likely that many districts are experiencing a similar struggle to maintain up-to-date and reliable computer equipment.

Ancient Egypt WebQuest

Pam and I discussed the best structure for the project and decided to divide the topic of Ancient Egypt into six areas of study that could be explored at learning stations. The learning stations included 1) the Land and Time, 2) Daily Life, 3) People and Culture, 4) Arts, 5) Science and Technology, and 6) Mummies and Pyramids. Students were divided into four heterogeneous teams of five to six students each according to ability level and gender. The six learning stations were divided across two weeks so that teams visited the first three stations the first week and the second three stations the second week. The teams spent approximately one to two hours each day at one of the stations, and rotated to a new station each day so that each team visited all of the stations. Each learning station contained books on Ancient Egypt, research folders for students to use to store notes, index cards, and additional supplies relevant to the topic. For example, the "Land and Time" station consisted of a bulletin board with a timeline of Ancient Egypt on which students added key dates, events and illustrations, and a map of Egypt to which students added physical and political features. Teams at each station also received charts on large sheets of paper. Each chart identified categories of data to be gathered on the topic. For example, the chart at the Daily Life station guided students to explore topics such as family life, marriage, food/cooking, cosmetics, and clothing.

Each week the fourth learning station was the set of computers at which students used a WebQuest on Ancient Egypt that I developed. The WebQuest was created using a template that was downloaded from the WebQuest page online. The template allows the user to insert the content of the WebQuest using a composing tool such as Netscape composer, then publish the page to an Internet server. The WebQuest on Ancient Egypt guided students through the five stages of the project. In the Introduction section, students were told that they would be traveling back in time between 2000 and 5000 years to the land that we know as Egypt. Questions were posed such as, "What do you think we will see?" "How will the people communicate with one another?" "What will their daily lives be like?" and "What kinds of scientific advances will they be working on that will still be around today?" The Task for the students was to gather information about Ancient Egypt to be placed in a Time Traveler's Guidebook. Each student created a guidebook that included three entries for each of the learning stations they visited. Students selected the information to include in the guidebooks based on what they thought would be most important to know once they arrived in Ancient Egypt. The guidebooks consisted of pocket pages that allowed students to insert cards with drawings and descriptions of significant facts.

The Process section guided students to explore links to numerous web sites on Ancient Egypt with the goal of assisting any of the three teams around the

room. Team members who had trouble finding information at one of the learning stations wrote questions on index cards and brought these to the WebQuest station. Students on the computers used the links provided, as well as web sites found through kid-friendly search engines, to gather information for the teams. As soon as students located and read relevant Internet sources, they printed the information and delivered it to the station exploring the topic. Once students completed their data collection, they selected the information they deemed to be most significant at each station and created their Time Traveler's Guidebooks. The guidebooks were presented to the class and evaluated using a rubric that assessed content, mechanics, presentation, and participation. The Conclusion to the WebQuest encouraged students to continue asking questions about the past and to consider how other ancient societies compared with the Ancient Egyptians.

Data Collection and Analysis

The data for this study consisted of field observations, interviews with students, student work, and a journal kept by Pam. My role during the data collection was one of participant-observer (Gans, 1982). I observed and assisted the students on five of the eight days they worked on the WebQuest. A graduate student trained for this task recorded observation notes (2). Shortly after completing the WebQuest portion of the project, eleven students were interviewed. Additionally, nine students were interviewed approximately two

weeks later once the project was complete. All twenty interviews were tape recorded with the permission of the student and were transcribed for analysis. The interviews followed a semi-structured interview protocol (see appendix). The student work collected upon completion of the project included the Time Traveler's Guidebooks, the data charts, and the research folders. During daily debriefing, Pam also asked the students to complete tasks such as, using index cards to record an interesting fact they learned, writing a comparison of the WebQuest activity to a traditional social studies lesson, and listing everything they could about Ancient Egypt. These data were also collected for analysis.

The data analysis began with an initial coding of the data accomplished by reading through the interview transcripts, observation notes, teacher journal, and student work and making notations in the margins. The data were then classified using categorical aggregation during which a collection of instances were sought with the goal of detecting issue-relevant meanings. Finally, the categories of data were interpreted in an effort to develop naturalistic generalizations that might allow others to learn from this case or apply it to similar cases elsewhere (Stake, 1995; Creswell, 1998).

Findings

The findings are presented as three hypotheses to guide future study of the WebQuest technique in particular and Internet-based inquiry learning in general.

Hypothesis 1: Students have differing perceptions of the value of Internet sources and print sources, but many find print sources preferable to Internet sources.

Students were asked whether they believed they found more information when they were working on the computers using the WebQuest or when they were working at one of the learning stations with books and hard copies of Internet sources. Twelve of the twenty students (60 percent) interviewed believed they gathered more information when working at a learning station with print sources than when working online. One student remarked that she preferred working with books, "because like you already have the information on paper. You didn't have to wait …to get on the computers to give it to you." Another student commented that he preferred books because, "[When you're on the Internet] you couldn't do nothing because it goes so fast. If you have the book, you have it more." In other words, the book does not disappear from view with the click of a button. Several other students made similar comments suggesting that reading from books was preferable to searching for information on the Internet and reading from the computer screen. Furthermore, all students who typically struggle academically believed that working with print sources was preferable to working online. There was no clear pattern of preference among the higher achieving students.

Students were then asked whether they thought they used the information contained on printouts from Internet sites or the information found in books more

frequently as they recorded information on their data charts. The students were evenly split in their response to this question. One boy argued that books were better because, "if you read out of the book you just go to the index and look up exactly what you want and go to that page and it's right there." Some students, however, believed that hard copies of Internet sources were more desirable because the information was more detailed and the printouts could be sorted easily by topic.

The observation data helps to illuminate these student perceptions. The students often appeared hurried and impatient when they worked on the computers. They needed to be reminded frequently to read the information on the screen to determine its relevance before printing or moving on to another screen. Some students appeared to function as if the information on the screen did not really exist until it was printed onto paper. There appeared a sense of urgency to move on to another web site as if the opportunity cost of stopping to read the screen was too high.

Hypothesis 2: Students' strategies for gathering and organizing information are initially characterized by a quest for the 'Path-of-Least-Resistance,' but the teacher can successfully guide students to more productive approaches.

The students approached their daily roles differently when they were working at the WebQuest station than when they were working at a learning

station with print sources. In both locations, students often looked to the other group to guide their data gathering efforts. The students at the learning stations often avoided reading the print sources and preferred to ask the WebQuest station students to find answers to their questions on the Internet. Similarly, the WebQuest group typically printed Internet sources without reading the information to be sure that it addressed the question asked by the Print Source groups. The WebQuest group expected the Print Source groups to sort through the information collected to find the answer and the Print Source group expected the WebQuest group to find and deliver a direct answer to their question.

Many students initially perceived using a search engine as preferable to accessing a site that was linked directly from the WebQuest. This was intriguing given that one purported advantage of the WebQuest technique is that students are provided with direct links to relevant online sources. One student explained that she preferred using the search engine "Ask Jeeves for Kids" because, "you could ask him [Jeeves] a certain question and if it didn't turn up right or you misspelled something he would tell you … and then that would take you right to it." We observed that the learning disabled students in particular preferred to type a specific question into the search engine rather than attempt to determine which site listed on the WebQuest might contain relevant information. As the project progressed, however, most students began to acknowledge that, "searches don't

always give you what you're looking for" and that by using the links provided in the WebQuest the information is "already there and you don't have to wait."

The 'Path-of-Least-Resistance' strategy diminished somewhat as the project proceeded. Toward the conclusion of the project, WebQuest group students were observed saying, "No, they already have that [information]. Let's see if this other site has what they need." These students had begun to evaluate the relevance of information in responding to a question. Similarly, the Print Source groups were observed organizing the information printed from the Internet and evaluating the completeness of the data collection charts. Although the students may be given some credit for taking the initiative to improve their data collection and organization strategies, Pam's role in guiding the students' data gathering strategies through daily direction must not be discounted. Pam noted her adjustments to the project throughout her journal. For example, on the third day Pam wrote,

> "Because of my frustrations [from the second day], I have made some changes: 1) Each group has a list of suggestions in their folder of things to work on; 2) "Post-it" notes have been placed on charts on different categories with suggestions and/or questions; and 3) I reviewed all roles/expectations [with students] before starting. Rotations went well today! Students were on-

task and accomplished a lot. I observed lots of organization and delegation of responsibilities." [emphasis in original]

It is likely that without such teacher support, the students would have continued to avoid reading the sources or engaging in the higher level thinking necessary to organize, evaluate, and synthesize those sources.

Hypothesis 3: Students of varying academic ability levels can conduct inquiry-oriented investigations, but they approach and perceive the value of such investigations differently.

Of the twenty-three students in Pam's class, six were identified as needing special education services. Both Pam and the special education resource teacher noticed an increase in the level of engagement and success of the special education students when compared with more traditional, textbook-driven lessons. As noted above, there were differences in the perceptions and strategies of special education students. These students preferred using print sources to reading from the computer screen and tended to rely on search engines heavily when working online. In addition to these differences, the special education students differed from other students in their perceptions of the value of this Internet-based, inquiry learning experience. All students were asked what they enjoyed about using the computer to find information. Those with higher academic abilities responded that they enjoyed the variety and volume of information available online. One

student explained, "There were so many different sites that you could go into and there would be …different kinds of information." Another remarked that he enjoyed, "getting to see all the information that was there [online]."

The special education students, however, were less impressed by the volume and variety of information available. These students consistently reported that they enjoyed the satisfaction of finding information and helping the group. One student stated, "I liked helping people look up what they needed." Another student reported that, "It was fun when I finally found that thing they were looking for." A third student commented, "Everybody kind of depends on you to get what they want so you know that you're helping someone else out." The higher ability students in the class would rarely have considered the special education students as sources of information. This project empowered these students to participate in the quest for information and they appeared to derive great satisfaction from playing the role of data gatherer. Perhaps in conjunction with the self-esteem boost they derived from the project, these students also tended to recall information about the topic during interviews equivalent to what was recalled by higher ability students.

Conclusion

Many have promoted the notion of the classroom as a community of inquiry (Vygotsky, 1978; Bruner, 1986; Seixas, 1993). Bruner (1986) noted, "I

have come increasingly to recognize that most learning in most settings is a communal activity, a sharing of culture. It is not just that the child must make his knowledge his own, but that he must make it his own in a community of those who share his sense of belonging to a culture." Similarly, advocates of cooperative learning in social studies have suggested that an environment of interdependence among learners can enhance the attainment of the civic competencies central to social studies education (Stahl, 1994). The findings of this case study suggest that a community of inquiry can be developed in a sixth grade social studies classroom and that the Internet can serve as one medium to support the inquiry process. Furthermore, the benefits of the community of inquiry can be realized in a relatively brief period of time with appropriate guidance from the teacher.

These results are largely positive for those promoting inquiry learning and cooperative learning. The implications for the use of the WebQuest technique, however, are less clear. The findings suggest that some students are motivated by the use of computers and that the WebQuest approach can be used successfully as a structure for inquiry learning. Additionally, students gained an understanding of the variety of historical sources available on the Internet and the need to consider the accuracy and relevance of such sources. Given the differences in student perceptions, strategies, and abilities, though, this project raises a few questions for

consideration. Should the Internet be used primarily as a supporting tool or as the focus of classroom activity? Should students who prefer to read from print materials be required to review sources on the Internet? Do hypermedia environments encourage students to increase the pace of their activity and thus neglect thoughtful reading of and reflection on materials? Should a WebQuest be structured differently for students with learning disabilities? Although precise answers to these questions cannot be provided based on this initial study, these and other questions might guide future investigations into the use of the Internet for inquiry learning.

The discourse on the use of the Internet and emerging technologies in classrooms ranges from enthusiastic support to doomsayer accounts of the destruction of children's minds. Perhaps the best approach is a cautious optimism that embraces the potential of technology to enhance teaching and learning experiences, but recognizes the potential hazards of the overuse or inappropriate use of the Internet and other computer-based tools. The role of the Internet in classroom inquiry experiences may best be one of supporting cast rather than starring lead. WebQuest has obvious value as an instructional approach that encourages the use of both print and Internet-based sources. Rather than pull books out of students' hands to place a keyboard in front of them, the best WebQuests seize opportunities to use both types of sources. Such as strategy may

help students to recognize the value of diverse sources accessible through diverse media as they engage in constructing their knowledge of history in a community of inquiry.

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APPENDIX

Interview Protocol

- Tell me what you think about this project that we just did on Ancient Egypt?
  - What did you like about it?
  - What did you not like about it?

- Do you think you found more information when you were working on the computers or when you were at one of the stations with the books?

- When you were at one of the stations and you were adding things to the chart, do you think you used the books or the printouts from the Internet more?

- When you were on the computer and someone brought a question for you to look up, what did you do first?

- When you were on the computer, you had a list of links to sites on Ancient Egypt and you had links that took you to search engines like Ask Jeeves. Which do you think was easier to use, the direct links or the search engines?

- What did you like about working on the computer?

- What did you not like about working on the computer?

- Do you have a computer at home?

  IF YES: What do you use the computer for at home?

  (If they use the Internet) - what sites do you usually go to?

  Do you think your computer at home is faster, slower, or about the same as the ones in Mrs. [Teacher's] room?

  IF NO: Do you have much chance to use a computer someplace else (at school, at a friend's house?)

- What were the most important things that you learned about Ancient Egypt?

- What do you think would make a project like this better?

[1] The names of people included in this report are pseudonyms used to protect the confidentiality of the participants of this study.

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